

Translation

PATENT COOPERATION TREATY

PCT/DE2002/002836



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2001P15983WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2002/002836	International filing date (day/month/year) 01 August 2002 (01.08.2002)	Priority date (day/month/year) 28 August 2001 (28.08.2001)
International Patent Classification (IPC) or national classification and IPC H04L 12/28		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 29 November 2002 (29.11.2002)	Date of completion of this report 13 November 2003 (13.11.2003)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2002/002836

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages _____ 1-13 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____ 1-11 _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the drawings:
pages _____ 1/1 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE 02/02836

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-11	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following documents:

D1: DE 101 03 743 A (MITEL TELECOM LTD) 2 August 2001
(2001-08-02)

D2: WO 01/19053 A (SESMUN AMARDIYA; UNIV BRISTOL (GB);
MUNRO ALISTAIR THOMAS DONALD) 15 March 2001
(2001-03-15).

2. Document D1 discloses all of the structural features of the device according to claim 1, namely an arrangement for wirelessly connecting terminals (figure 2: 22, 26, 28) to a communications system, with:

- a) a data packet network (figure 2: 25) for transmitting data packets on the basis of network addresses that are valid within the network (generally known feature of a LAN),
- b) at least one transition device (figure 2: 20-1, 20-2, 20-3, 20-4) that is coupled to the data packet network and to which at least one short-range radio module (column 4, fourth paragraph) is coupled, the transition device having a coupling table with terminal addresses of terminals located within radio range of the at least one short-range radio module (column 7, lines 46-49),

c) a server (figure 2: 30) coupled to the data packet network for controlling connections to the terminals (column 5, line 41 to column 6, line 7).

Although document D1 does not explicitly disclose that an allocation table containing the allocation of terminals to the network addresses of transition devices is included in the server, which is coupled to the data packet network, there are indications that this type of allocation must occur. The presence and location of a visitor on the network are thus stored in the register (column 7, lines 5-6). Calls originating from a fixed network can be routed to the mobile subscriber (column 8, lines 55-57). Document D1 therefore includes sufficient suggestions that would necessarily lead a person skilled in the art to map subscriber identifications onto the network addresses of transition devices. Therefore, no inventive step can be inferred from this feature.

The device according to claim 1 also differs from the device known from document D1 in that a dynamic alignment of the allocation table with the coupling table is performed by means of a packet-based alignment protocol.

In document D1, by contrast, a location in the server is recorded in a dialogue with the terminal when it is checked in.

However, the alternative solution in claim 1 is already known from document D2, which describes a method of mobility management wherein a mobile terminal is registered in a foreign network, whereupon the foreign

network transmits an update message ("binding update") to the home network, which saves the allocation between the permanent address of the terminal and the address of the foreign registry (cf. D2, page 13, second paragraph).

Therefore, a person skilled in the art would also consider it obvious to employ said alternative solution, which is disclosed in document D2, in a device according to document D1 if the circumstances required it, for example, if it is intended that there not be a dialogue with the subscriber as part of the check-in procedure.

The subject matter of claim 1 thus does not involve an inventive step (PCT Article 33(3)).

It is also noted that registries in the visited network (VLR) and in the home network (HLR), between which an alignment is carried out by means of a packet-based protocol (MAP), are already sufficiently well known from the field of mobile telephone networks according to the GSM standard. For IP networks, the IETF has defined a similar arrangement ("Mobile IP") wherein a data connection is routed via a home agent in which is stored an IP address at which a mobile IP subscriber in a foreign network can be reached. The features of D2 mentioned above are a variant of this technology.

These features, which are generally known to a person skilled in the art, are enough to call into question the inventiveness of claim 1 with respect to document D1.

3. Dependent claims 2 to 11 do not contain any features which, in combination with the features of any claim to which they refer back, meet the PCT requirements for inventive step (PCT Article 33(3)). The reasons are as follows:

- the features of claims 2, 3 and 6 to 11 are known from document D1 (claim 2: column 5, line 67 to column 6, line 2; claim 3: column 4, lines 26-39; claim 6: column 4, lines 33-39; claim 7: column 7, lines 5-6; claim 8: figure 2 (38); claim 9: figure 2 (22, 23); claims 10 and 11: figure 2 (26);
- the features of claims 4 and 5 relate to other design details of the conversion device that are within the scope of normal practice for a person skilled in the art.

4. Documents D1 and D2 are not acknowledged in the introductory part of the description (PCT Rule 5.1(a)(ii)).